

Conservation Effects Worksheet

Land Use:

Pastureland Guidance Sheet No. 1

Current Treatment	Treatment Alternative
Well drained soils with moderate to steep slopes. Site is grazed continuously. Pasture consists of desirable species, but increases in both the annual forage production and its TDN are desired. Livestock currently roam the pasture with uneven grazing. Soil fertility is low and some areas of sparse vegetation have sheet and rill erosion exceeding tolerance levels. Better economic returns from the grazing operation are desired.	This combination of conservation practices will control sheet and rill erosion below tolerable levels. The pasture planting of legumes and grasses will yield sufficient forage tonnage and TDN required by livestock. Fencing will be arranged so a central pond will provide water at one location for all grazing areas. Soil tests will be basis for nutrient management.
Resource Concerns	Proposed Practices
Proper Resource Balance Economic improvement Forage production Sheet and Rill Erosion	Fence Nutrient Management Pasture and Hay Planting Prescribed Grazing Pond Trough or Tank
Current Treatment Effects	Proposed Treatment Effects
Forage production insufficient, limiting number of livestock raised.	Rotational grazing will provide high forage yield and feed requirements.
Supplemental feed required reducing profit per unit.	Supplemental feed not required reducing cost.
Low Production – 4000 lbs/ac/yr.	Production increased to 8500 lbs/ac/yr.
Soil loss 5 tons/ac/yr.	Soil Loss reduced to 1 ton/ac/yr.

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Land Use:

Pastureland Guidance Sheet No. 2

Current Treatment	Treatment Alternative
Well drained soils with moderate to steep slopes. Site is continuously grazed. Livestock have unrestricted access to perennial stream. Sloughing streambanks and livestock access contribute sediment, nutrients, and pathogens to the stream. Areas of the pasture have sparse vegetative cover due to acid soil and over grazing. The only source for livestock watering is the stream.	This combination of conservation practices will reduce sediment, nutrient, and pathogen delivery to the stream as the banks will be stabilized and the livestock prevented from surface water access. Interior fences will prevent uncontrolled livestock access in conjunction with a designated watering and crossing location in the stream. Nutrient management, including soil liming, and pasture planting will promote desirable quantity and quality vegetative cover to meet livestock forage needs.
Resource Concerns	Proposed Practices
Domestic Animal Water Requirements Forage Production Nutrients & Organics in Surface Water Public Health & Safety Streambank Erosion	Fence Nutrient Management Pasture and Hay Planting Prescribed Grazing Streambank and Shoreline Protection Use Exclusion Heavy Use Protection
Current Treatment Effects	Proposed Treatment Effects
Downstream drinking water unusable.	Controlled access will reduce nutrient, pathogen, and sediment water quality degradation improving water quality downstream.
Low production – 4000 lb/ac/yr.	Production increased to 8000 lb/ac/yr.
High phosphorus levels causing algae blooms.	Livestock exclusion prevents manure deposition in stream preventing algae blooms.
High pathogen count.	Pathogen counts will be reduced with no health problems.
200 tons/year of streambank erosion.	Erosion reduced to 20 tons/year.

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Land Use:

Pastureland Guidance Sheet No. 3

Current Treatment	Treatment Alternative
Moderate to steeply sloping field, continuously grazed pasture with serious soil erosion in some areas. Pasture consists of a single species of grass. Livestock grazing is uneven and water shortages occur frequently. Landowner wants to increase herd size without having to add additional pasture. Currently losing money on livestock operation. Quail numbers declining.	This combination of conservation practices will improve forage yields, increase livestock carrying capacities, improve wildlife values, reduce soil losses and improve the financial aspects of the livestock operation.
Resource Concerns	Proposed Practices
Low Carrying Capacity Domestic Animal Water Establishment, Growth and Harvest Forage Production Long-Term Financial Sustainability Sheet and Rill Erosion Wildlife Cover-Shelter	Fence Pasture and Hay Planting Prescribed Grazing Pipeline for Livestock and Recreation Pond Prescribed Burning Trough and Tank
Current Treatment Effects	Proposed Treatment Effects
Forage shortages during summer.	Warm season grasses and legumes added to forage system. Rotational grazing expanded to multiple fields increasing overall forage production.
Water shortages at certain times of the year. Distribution capabilities limited.	Pipelines and watering facilities added with better utilization of forages.
No legumes in cool season grass pastures.	Legumes added to forage system allowing higher carrying capacity and no mid-summer hay feeding.
Low Production 5 Aum/ac/yr.	Increased production to 12 aum/ac/yr.
Herd size less than desired.	Higher carrying capacity with same amount of acres with increased financial returns.
Soil loss – 5 tons/ac/yr.	Soil loss reduced to 1 ton/ac/yr.
Little cover for wildlife due to over grazing.	Improved cover and shelter for wildlife creating more wildlife and better hunting.